RIVAL ROYAL JEWELS

CROWNS AND TIARAS WORN BY SOME GOTHAM SOCIETY QUEENS.

Diamond Clusters Surrounded with Other Gems That Represent Millions of Dollars in Value.

New York Herald.

There are tiaras in New York that might purchase the ransom of a small army. Within some that have been recently turned out are imbedded more than 1,000 gems which, in their royal setting, cost from \$25,000 to \$40,000, many of the tiaras worn, however, are not regularly made so as to be available for no other purpose. They are combinations of stars on spiral pins, large corsage ornaments, the dog collar and other pieces which the owner's taste can arrange to encircle her throat or decorate her bodice as easily as to crown her head.

Mrs. Karrick Riggs possesses a superb | Theological Seminary, prepared papers disdiamond clasp reaching two-thirds the way across the decollete corsage. From this there hangs a pendant five inches long, of exquisite richness and workmanship. During the past season Mrs. Riggs has clasped her dog collar round her Psyche knot and placed this pendant in front, forming a tall aigrette coronet, which is eminently stylish and one of the most imposing of New York jewel pieces.

Mrs. Willie K. Vanderbilt, who was the first to set the tiara fashion here, still adheres to her original crown. When she brought this with her from Europe six | Assembly had passed upon the soundness years ago jewel designs and setting were not then as elaborate in America as they have since become. The huge diamond pea in a ring, a stud or an ear-ring had few rivals in small choice gems set in unique designs.

Mrs. William Astor had marvelous jewels, but she did not put a crown upon her head every time she appeared as an imposing function, and when Mrs. W. K. Vanderbilt did so even those who loved crowns and and conviction of Dr. Henry Preserved had plenty of money to buy them resented Smith is notice to all Presbyterian minishad plenty of money to buy them resented it for a while. Hers was the regular royal church every minister who takes part in the crown, standing all round in sharp spikes the discussion does so at the hazard of bestanding all round in sharp spikes thickly grusted with diamonds and pearls, and with not a tendency to a democratic tapering at the back. It was such a crown as Queen Gertrude wears in "Hamlet," and when those who had royal incomes

Mrs. Vanderbilt claimed no more than to be an ordinary democratic woman, yet she started in on a pretty good crown. She wears it still, and fashion has followed her in the compromise of the tiara. The tiars, dwindles modestly down toward the back, after the fashion of an ordinary subject's decoration, yet wearers look like royal princesses when they put them on.

A MAGNIFICENT TIARA.

A magnificent tiara mounted last season for Mrs. James P. Kernochan consists of five diamond stars mounted on a slender spiral spring, which causes them to move and dazzle with every movement of the wearer. They graduate at either side from the large sunburst in the center and are so lightly set that they look as if they had simply fallen on Mrs. Kernochan's hair. These stars separately have done duty in numerous ways, but grouped in the tiara have a really superb effect. The gems are of the purest water, and if again unset are sufficient to furnish enough diamond decoration for half a dozen generations of everage wealth. In point of value it approaches the weighty crown of Mrs. W. K. Vanderbilt, which is dazzling enough to tempt an entire race of burglars. They rely, however, less on private locks and safes for their jewels than on professional safe deposit vaults, otherwise one might tremble to think of the fate of the jewels of great value which my lady has been wont to stick in her pin cushion or the price of a respectable estate which is thrown from her corsage on to her pin

and heightened in front this season is that of Mrs. J. Townsend Burden. It was formerly a tapering wreath of vine leaves, to which she has recently added a cluster of grapes with a high spray of the leaves surmounting them. As a graceful coronet this, perhaps, exceeds in beauty any of the other new productions. The design is ex-quisite and the ornaments not made to spring upward from a straight tight band as is usual, but the leaves lie upon the hair softly instead, and just as would a wreath of natural plucked foliage. Jewelers are now kept busy resetting the jewels of old fashioned ornaments, the original necklace in particular, into permanent tiaras or preferably into jointable corsage ornaments which can only be worn in the hair. The old necklace which used to hang with its pendant midway down the fair low neck is now determinedly banished. Where persons can afford a small fortune to clasp round their throat, they wear the superb uncompromising dog collar, a riviere lying close to the throat or a string of pearls. But neck ornaments

Another tiara which has been enriched

are not compulsory, as they once were, It is only where people have them in the pre-vailing style in addition to everything else that they are worn at all.

The old necklace and earring jewels are going into corsage ornaments, which are often the size of a breastplate, but can be disjointed into algrettes, long side bodice clasps, shoulder ornaments and various exact other decorations. A designer for the resetting of diamonds and other precious jewels into devices which can be made to serve the greatest number of ends is a valued and busy official in these days.

SOME BLAZING JEWELS.

The bride who first appears with head and neck adorned, but the corsage a whole blaze of diamonds, will be seen next in society with a tiara, an aigrette on the shoulder and probably one to two stars on her bodice. Her diamond armor will have been disjointed to make these varying and itlusive decorations, for it will be impossible almost to tell what diamonds she really possesses until some imposing function arises when it may naturally be expected she will have them all on.

Miss Edith Kip, on her recent marriage with Mr. McCreery, was the recipient of some of the most superb jewels of latest convertible design. One corsage ornament. the gift of her mother-in-law, might serve for a fair-sized shield. It is a rose and leaf design, separable into a demi-coronet for the hair, a large star and a lengthwise fringe of brilliants which can be worn at the side of the bodice. Worn in its entirety, it is a manificent sheet of blazing

Mercury wings are now a decided range. or where one has the large stones of a pair of earrings they can form in their claw setting a glowing back for a very fin de stecle butterfly. His shining wings form a fine setting ground for odd rubies and sapphires, in which they look most appropriate. A butterfly with a prismatic sprinkling on his diamond crusted wings of red rubies and sapphires blue and yellow is now the most welcome insect which can light upon the hair of a fin de siecle maid or matron.

HARD TIMES AND HEALTH. A Theory that Men with Other Things to Think of Stay Well.

Northwestern Christian Advocate.

Not long since we heard segral physicians comparing notes concerning the current "duliness" in their practice. It was agreed that the income of even the best doctor is, in these hard times, rather small. Not long after we heard two pastors commenting upon the relatively smaller number of funerals they are now asked to attend. Next occurred a mention of an undertaker's remark about the "falling off in his business," and last followed a remark from a domestic whose gentleman friend is a grave digger: "Patrick says that at this rate he will starve and be buried himself." These incidents are genuine and occurred in the order named. The query arises whether or not hard times stimulate men and postpone or defeat the ravages of some ailments. It is of record that men have died of alleged cholera, when, in fact, they were not infected by that scourge. Other experiments have been made by physicians and scientists upon crim pals who had forfeited their lives to the law, which, though of questionable morality and right, have gone on record to prove that human imagination may affect health and sometimes cause death. Tuke's volume, entitled "The Influence of Mind Upon the Body," contains many curious cases. If these instances be correctly stated-and we have no reason to doubt-men wear out from excessive work in prosperous times and have "not time to be sick" in hard times. Or does the simpler table diet when money is scarce conduce to improved health and consequent so tardy a call would hardly be acceptable, and a more auspicious occasion should be that men made rich by industrious labors sought for renewing the acquaintance.

grow "flabby," lose physical tone, and actually may go into fatal decline. It is quite certain that that philosophical something called "expectation" often influences the issues between life and death, which doctrine is not out of harmony with the Christian belief that in God are those issues of life At any rate we cannot hesitate to tell life. At any rate, we go not hesitate to tell a friend to "take care of his health," which advice seems to recognize human physical responsibility and ability to "keep well." The English are quite given to that kind of statistics which tabulate sociological facts and furnish materials for some very interesting generalizations.

DR. HENRY P. SMITH'S CASE.

It Will End Freedom of Teaching an Discussion in the Presbyterian Church.

In January, 1891, Dr. Briggs delivered his now famous inaugural address at Union Theological Seminary on the "Authority of the Holy Scripture," In February, before the address had been fully published, a resolution was introduced into the Cincinnati Presbytery, in effect calling on the General Assembly to veto Dr. Briggs's election. Dr. Evans and Dr. Smith, both of them at the time professors in Lane cussing this resolution, in which they contended that the absolute inerrancy of the Scripture is not a doctrine taught either in Scripture on in the Westminster Assembly's Confession of Faith. Dr. Smith also contributed two articles to the New York Evangelist discussing the whole subject of creed subscription and the latitude of belief allowed to one who had subscribed to the Confession. For this discussion of Dr. Briggs's theological positions and his responsibilities under the subscription, published before the General of Dr. Briggs's views, Dr. Smith has now been condemned as a heretic and excluded from the Presbyterian pulpit. He was not accused of teaching in the seminary chair doctrines contrary to the Confession, only of defending, before they had been condemned, doctrines whose soundness was on trial before the court. The advocate is con-victed of treason for defending before a tribunal one who had been accused of treason. The practical effect of the trial ing turned out of the ministry for so doing if, as the result of that discussion, the ma jority goes against him. This decision, if it be submitted to by the Presbyterian minority, is the end, not merely of freedom saw it they hinted that they didn't care much for having crowned heads sitting among them.

of teaching in Presbyterian theological seminaries and freedom of preaching in Presbyterian pulpits, but of freedom of debate in the constitutional judicatories of that church. Dr. Smith's case differs radically from Dr. Briggs's case in two respects: First, in that he is not accused of holding that the reason and the church are sources of authority as well as the Bible; and, secondly, in that he is not accused because of any teaching officially and in his minis-try, but only of defending, before the courts of the church, teachings the soundness of which was still under debate in the courts of the church. It should be added that there is no suggestion that his spirit has been provocative or polemical, or other than kind, courteous and Christian through-

> This is the gravamen of our condemnaion of the Presbyterian General Assembl It not only practically endeavors to decide what is truth by a majority vote in a mass meeting, but it prohibits and punishes free debate exercised in the previous deliberative process. This is wholly un-American; for America decides action by majorities when co-operative action is necessary, but leaves opinion wholly free. This is wholly un-Protestant; for Protestantism teaches that every man has a right to read and study the Bible for himself, and to reach conclusions respecting it without let or hindrance from ecclesiastical courts, ancient or modern. The Presbyterian General Assembly will proba-bly follow up this decision by securing such changes as will give it the control of the Presbyterian seminaries. Then, with power to control the teaching in its seminaries, power to dictate the teaching in the pulpit and power to silence as a heretic any man who ever, in presbytery, synod, or assem-bly, ventures to call its doctrines or methsystem of absolutism surpassed only by that of Rome itself.

> But to silence men requires more than system; it requires men who can be si-We do not believe that the Presbyterian church is composed of such men. Whether it is or not we shall soon see Meanwhile liberty of thought remains in the Episcopal, Congregational, Baptist, Methodist and Reformed churches. And in the Presbyterian Church Dr. Henry Preserved Smith takes his place among the men whom persecution has honored.

PASTEBOARD ETIQUETTE.

A Few Statements Concerning Making and Returning Calls.

New York World.

"Calling" is the pet aversion of most women, and some of them are in Stygian darkness as to the rules which govern that dreary function. Even the fairly well informed are rather hazy in their notions about the etiquette of the mat-The general impression is that calls must be made some time, and must be returned some time, but beyond that few women go What is to be said about a first call? On arrival, should calls be made at once on friends and acquaintances, or should they take the initiative and be the first to call? This question, so often put, has but one answer, not only on the ground of etiquette, but also from a common-sense point of view. The arrival should intimate the fact of being in town, either by calling personally or sending her card. Otherwise weeks may elapse be fore acquaintances become aware of the exact whereabouts of those who have arrived; and when the stay is to be but a short time-limited to weeks-the loss of time is regrettable. This rule holds equally good in country calling between acquaintances, although intimate friendships occasion it to be reversed in many instances, and it is then considered kind friendly and polite to call immediately if it is known that a popular neighbor has returned, and not to wait to be taken in turn with the more ceremonious calls. How soon should the call be returned if the caller is a new arrival in town? Not, perhaps, the same afternoon, as with foreign royalties, but within the week, engage ments permitting, and better still within three or four days. It is idle to expect to find any one at home during the calling hours, but calls are made nevertheless and cards are left. It may be asked, what is the use of calling when there is a certainty that the answer "not at home" will be received? It has a distinct use. A call is a politeness shown to the person called upon, and, moreover, it brings about a meeting, and is the basis of invitations. After the first interchange of calls, what length of time should follow upon a second

call? This is a point where a little hesitation steps in. Say a new arrival has called and been called upon within the week, when should the call be repeated? Most probably some kind of invitation will reach her. If an evening entertainment, she will have the opportunity of leaving cards afterwards. If there are no invitations within three weeks would be a reasonable time wherein to call, if one is making a brief stay in town. Otherwise six weeks or two months might be allowed to expire before again calling. Not infrequently a new arrival sends out invitations as soon as calls have been returned. This gives an opening for further calling on the new arrival if invitations are to evening entertainments or to dinner. After an invitation to luncheon a call usually follows within a fortnight. A question that occurs to many is whether it is more correct to return a first call on an at-home day or on any other day of the week. To return a call on an at-home day is better on various accounts. The mistress of the house is at home for a certainty, and, being at home, she probably prefers to receive calls on that day. Is it etiquette to call a second time before a call has been returned? The answer is, no, for mere acquaintances; even if the call is delayed, it must still be waited for, but it in no wise interferes with invitations being given and accepted, and a call overdue is beside the question. Between friends this etiquette is not in force, and a friend might call once or twice on another without hesitation, however long a call was overdue.

If a call is returned by card, what is intended thereby? As a general rule, it is meant to restrict the acquaintance to a card-leaving one. This conclusion should not be arrived at, however, without positive proof that such is the case. A second oc currence, for instance, would be a decided proof. When the conclusion, however, amounts to an established fact, the calls

considerable interval of time. If a call has not been returned, say, for six months, nine months, or even twelve months, has too long a period of time been allowed to elapse to admit of its being paid? No, providing there is the smallest excuse or justification for its having been so long delayed. Living far apart in town, or in the country at a considerable distance, absence from home or occupation or illness are paramount excuses to urge. But if indifference or caprice are the only reasons, and neither of the foregoing excuses exists,

should be returned with cards only after a

Thousands To-day Are Smoking

Doney's

Chousands o-morrow

HUMOR OF THE DAY. Not a Bit of Danger.

New York Press. Inquirer-Do you think any person is ever buried alive? Physician—I should say not. There is no danger of such a thing if a regular physician is in attendance.

His Opinion Confirmed. Spare Moments.

"Mr. Dawson is a lovely man," said
Miss Wellon. "I told him I was twentytwo years old, and the dear thing said I
didn't look it."
"Well, you don't," said Miss Porte. "You
look thirty-two."

The Real Trouble. New York Herald.

Colonel Bluegrass-I don't think I'll make another ocean voyage. Briggs-Couldn't you keep any food on Colonel Bluegrass-Food, sah! I couldn't keep any whisky there.

Wise as Men.

New York Weekly. Little Johnny-Sammy Sims called me liar to-day. Mother-I hope you were able to convince him that you were a lover of truth.

Little Johnny—Guess I did. I didn't let up
till he hollered "Enough."

Politely Told.

New York Weekly. Young Lady (strolling in the woods)-Ooo! What a horrible odor! Something must be Polite Youth (in the fur line)—N—o, it's a live fur-bearing animal, known to the trade as the black marten.

Suppressing a Nulsance.

New York Weekly. Business Man-Here is a quarter for you to go to the variety theater. Office Boy-Thankee, sir. Anything I can do for you? Business Man-Yes. Learn a new song. am a little tired of the old ones.

Make the Surroundings Natural.

Dealer-This is the best parrot we have, but I wouldn't sell him without letting you know his one fault; he'll grumble terribly if his food doesn't suit him.

Miss Fitz-I'll take him; it will seem quite like having a man in the house.

"Lives of Great Men-

Tom Bigbee-I believe the president of when he was a boy, sold candy Uncle Oatcake-You don't say so! They do charge like thunder for the candy, but I hardly thought there was so much money in the business as that.

Quickly Found.

New York Weekly. Mother-See if you can't find me two or three tacks. Boy-Yes'm.

"But, stop; where are you going?" "Going to pick up a few tacks." "But you are taking your bicycle."

"Yes'm; it's a pneumatic." Their Greatest Misfortune. Spare Moments.

Said a Playgoer-The greatest misfortune that can, I suppose, happen to an actor is to lose his voice? To Which an Actor Replied-No, sir; our greatest misfortune comes in when we have

to play the part of a king or an emperor on the stage, and go to bed without supper. A Honeymoon Episode.

New York Press.

out on strike.

"These biscuits are not like mother's," he said, as they sat at the breakfast table. Her lip quivered and she was on the point of bursting into tears. "No," he continued, "they are not like mother's; they are a great deal better."

Then she rose and fell upon his neck and hugged him.

The Bieycle Stoop. New York Weekly.

Bender-I have made the trip from New York to Philadelphia on a bicycle, and have orders to write it up for a magazine. Wonder where I can get a good horse?" Friend-What on earth do you want with Bender-I must repeat the trip in a car-riage, so as to get an idea of the scenery, you know.

Information Wanted. New York Weekly.

Traveler (from Podunk)-Is this here th' bureau of information? Railroad Clerk-It is. Traveler-Well, about six hours ago a feller took my watch an' satchel around th' corner to git my name engraved on 'em, so they wouldn't git lost, an' I wanter know if the engravers of this ere town are all

A PLEA FOR THE CORSET.

It Is the Root of Morality, Self-Respect and Health.

London Pall Mall Gazette. A lady possessed of a more than usually trying husband, given to being pompous and overbearing, confessed that when her lord was more than her patience could stand she retired to her room and took off her corsets. It was equivalent to throwing up the sponge; she felt incapable of holding her own any longer, and gave way bodily and mentally to a stayless woe that filled those of her acquaintances to whom she imparted this characteristic habit with silent contempt, tempered with the pity one gives as an alms to all weak things. It is probable that if this poor lady had held on to her corset her pluck would not have deserted her, and the pompous husband

gies as much as it does the physical; and many a slatternly Blowsabella that we see would take an entirely different view of life and its responsibilities if she were put into a properly built corset. All the diatribes that have been flung at woman's best friend are each more absurd than the other; and it is pleasant to find that of late doctors are becoming enlightened enough at last to own that civilized woman's body requires stays just as much as she requires a house to live in and a varied regime that would simply have horrifled her primeval ancestors. Of course, if women choose to abuse the benefits of the corset, and, instead of reveling in the support and gentle firmness of outline which prevents petticoat strings, buttons or other details of underclothes from hurting the tender flesh, strive to attain the wasp-like abomination of a sixteen-inch waist, they are to blame, but not the innocent corset. Abuse of anything, whether it be tea, topacco or tubbing, beef or bicycling, rest or exercise, is always an inartistic mistake. Like Mr. F.'s aunt, we "hate a fool," and the woman who squeezes all the lissomness out of her shape and becomes as stiff as a broom handle or a wooden image from the South Sea islands merits no other title. To those who seek to get the best out of everything what charms there are in a well-made corset!. A woman in her corset and petticoat is a subject for a poet, as De Musset knew well when he immortalized "La Marchese l'Amegui." But much depends on the corset, which may be as beautiful as the cally of a flower, when it is created by such artists as Festa, of Lon-don, or Weiss, of Vienna, but also may be simply a box-shaped receptacle, when fashoned by indifferent hands. The chief matter is to see that the lines are kept as long as possible. The corsets that spread out suddenly above and below the waist convert a woman into something resembling a pilgrim's gourd, and are of the kind which have given rise to the grewsome tales of livers being cut in two by tight lacing. With the long lines opening out gradually as the shape expands, the pressure is equally distributed, and everything kept in its proper and natural place, while the figure preserves that swaying, flowerlike suppleness which is by far its greatest beauty and charm.

Corsets should never be worn of anything but satin or brocade. Of course, we are writing for the artist in such matters, the woman who wisely looks upon the inner mysteries of clothes as being of far more importance than the outer garb, which undergoes contact with the world at large, and, therefore, can, in no way, be considered as a sacred part of her personality. An outcry will, perhaps, be made as regards expense, but there is no need, for it is easy to buy in the bi-annual sales rem-nants of thick brocade (a yard and a half is sufficient) for a few shillings, and equally easy to get these remnants converted into the loveliest of corsets by a professional corsetiere. Besides, satin and brocade corsets not only last longer and keep their shape fer better than the humble and unornamental ones in coutil, but the fit of a bodice is entirely different over a silken corset. The silken "friend" is lighter, softer, more pliable and everything slips over it as if over a skin. But let those of our feminine readers who respect their appearance avoid the corset of the middle class French novel; the corset of black satin which helped to cover Bourget with ridicule in the eyes of Parisian mondaines when he described, as part and proof of the riotous luxury of the heroine of "Mensonges," a corset de satin noir. It is the only ugly corset; ugly in its economic sug-For daily winter wear the rich shades of

gestiveness, and uglier in the way it seems to the eye to cut a woman in two. warm color-orange, mazarine blue, cardinal, myrtle and many other similar ones answer admirably, especially if the silk petticoats are made to match, as they ought to be. Of course, for evening wear, or now that spring is merging into summer, lighter colors appeal irresistibly, and nothing is more lovely for corsets than "shot" brocades of tenderest green and pink, with a design of pink rosebuds in Watteau baskets, of pale blue and white covered with lines like fish scales in silver, of brilliant orchid color overlaid with sprigs of heather. A yard and a half of any of these brocades is not a ruinous expense, nor is the subsequent making, if once the right artist has been found who will cut the material so as to make the design meet and repeat itself with mathematical accuracy, for haphazard arrangement of the design means inartistic cutting.

TOO MUCH FOR A CROW. The Bird Was Suspicious of a Piece

of Meat Swinging in the Wind.

John Burroughs, in the Century. The crow has fine manners. He always has the walk and air of a lord of the soil One morning I put out some fresh meat upon the snow near by my study window. Presently a crow came and carried it off. and alighted with it upon the ground in the vineyard. While he was eating of it another crow came and, alighting a few yards away, slowly walked up to within a few feet of his fellow and stopped. I expect to see a struggle over the food, as would have been the case with domestic fowls or animals. Nothing of the kind. The feeding crow stopped eating, regarded the for a moment, made or two, and flew away. Then the second crow went up to the food and proceeded to take his share. Presently the first crow came back, when each seized a portion of the food and flew away with it. Their mutual respect and good will seemed perfect. Whether it really was so in our human sense, or whether it was simply an illustration of the instinct of mutual support which seems to prevail among gregarious birds, I know not. Birds that are solitary in their habits, like hawks or woodpeckers, behave quite differently toward one another in the presence of their food. The lives of wild creatures revolve about

two facts or emotions, appetite and fear. Their keenness in discovering food and in discovering danger are alike remarkable. But man can nearly always outwit them, because, while his perceptions are not so sharp, his power of reflection is much greatprobable that if this poor lady had held on to her corset her pluck would not have deserted her, and the pompous husband would have learned better manners.

The corset (may its shadow never be less) is the root of morality, self-respect and health. It braces up the moral ener-

As I have above stated, I sometimes place meat on the snow in front of my study window to attract him.

On one occasion, after a couple of crows had come to expect something there daily, I suspended a piece of meat by a string from a branch of the tree just over the spot where I usually placed the food. A crow soon discovered it, and came into the tree to see what it meant. His suspicions were aroused. There was some design in that suspended meat, evidently. It was a trap to catch him. He surveyed it from every near branch. He peeked and pried and was bent on penetrating the mystery. He flew to the ground, and walked about and surveyed it from all sides. Then he took a long walk down about the vineyard as if in hope of hitting upon some clew. Then he came to the tree again, and tried first one eye, then the other, upon it; then to the ground beneath; then he went away and came back; then his fellow came, and they both squinted and investigated and then disappeared. Chikadees and woodpeckers would alight upon the meat and peck it swinging in the wind, but the crows were fearful. Does this show reflection? Per-haps it does, but I look upon it rather as that instinct of fear and cunning so char-

acteristic of the crow. Two days passed thus. Every morning the crows came and surveyed the suspended meat from all points in the tree, and then went away. The third day I placed a large bone in the snow beneath the suspended morsel Presently one of the crows and morsel. Presently one of the crows appeared in the tree and bent his eye upon the tempting bone. "The mystery deepens," he seemed to say to himself. But after half an hour's investigation, and after approaching several times within a few feet of the food upon the ground, he seemed to conclude there was no connection between it and the piece hanging by the string. So he finally walked up to it and fell to pecking it, flipping his wings all the time, as a sign of his watchfulness. He also turned up his eye, momentarily, to the piece in the air above, as if it might be sword of Damocles, ready to fall upon

Soon his mate came and alighted on a low branch of the tree. The feeding crow regarded him a moment, and then flew up to his side, as if to give him a turn at the meat. But he refused to run the risk. He evidently looked upon the whole thing as a delusion and a snare, and presently went away, and his mate followed. Then I placed the bone in one of the main forks of the tree, but the crows kept at a safe distance from it. Then I put it back to the ground, but they grew more and more suspicious; some evil intent in it all, they thought. Finally a dog carried off the bone,

and the crows ceased to visit the tree. THE PHENOMENA OF NEW STARS. They May "Arise and Shine" and as

Suddenly Disappear. The new star in the constellation Auriga has proved a veritable Sphinx to astronomers; but, unlike the Sphinx, it has not only propounded one enigma, but is continually presenting new riddles to be explained. The first surprise offered was the disclosure that the new body was a double star the components of which were lying through space at unprecedented velocities. Then this singular stellar object was found to be a triple star; next, its light fluctuated in an extraordinary manner; and finally its spectrum disclosed the fact that it had become a planetary nebula. It should be understood that, owing to the enormous distance from our earth, the components of the new star have never been resolved by any telescope, all the phenom-ena above mentioned having been revealed by spectroscopic analysis of the light of the mysterious heavenly body. While the new star in Auriga is one of the most interesting of its class, it is by

no means the only "new star" that has been observed, but current theories fail to offer a satisfactory explanation of these perplexing celestial objects. They must be of a nature entirely different from a star like the sun. A typical new star is probably a thousand times brighter than our sun: it appears suddenly and disappears within a year. The formation of such a body is difficult enough to explain on any theory except that of a stellar collision (which astronomers have hitherto been very loath to accept); but to explain fts rapid disappearance is still more difficult. It has been estimated by astronomers that ten millions of years will elapse before the sun will lose half its present lustre. Imagine a sun a thousand times as bright as ours cooling in a single year! Such an idea

A theory was first propounded in 1878 by Prof. A. W. Bickerton, of Canterbury College, Christ Church, New Zealand, according to which the phenomena of new stars were explained as being the result of a partial impact between two suns the light of which had been extinguished. This theory and its consequences so completely fit case of the new star in Auriga that it may be accepted as their true explanation. On investigating the conditions under which collisions between stellar bodies might occur it became apparent to Professor Bickerton that in a majority of cases they would not involve the colliding bodies as a whole, but that the bodies, in passing, would merely graze each other. The funda-mental idea of this theory is that as a result of such a partial impact a third and new celestial body would necessarily be

evolved. A pair of dead suns meet in space; it mat ters not whether the "grazing" impact be great or small, the amount of heat genererated by the contact is as great as in the case of a complete collision. The contact does not stop the main body of the colliding spheres; the "grazing" parts merely shear off, and the two suns sweep on in their course. The sheared off portions remain behind and coalesce into a single mass of glowing gases, and the momentum of the later having been destroyed in the collision, the energy of motion is converted into more heat. If the new body so formed be comparatively small its power of attraction is not sufficient to hold together the molecules which compose it. Heat is a form of molecular motion, and if the temperature be sufficiently great the molecules travel so fast that each of them upon reaching

nebula, and in a short time it is completely dissipated. This theory explains the "new stars," and shows how a very brilliant body may be produced that may soon lose its light; not because it has cooled, but because it was too hot to hold together.

ARTIFICIAL FUEL GAS.

Reasons Why It Cannot Be Substituted for the Natural Fuel.

"All the rose-colored claims of theorists regarding the substitution of manufactured gas for natural gas for use in a general way will not make such a thing possible under existing conditions," said a gas ex-pert yesterday. "It would be impossible to introduce a manufactured gas and permit it being used as gaseous fuel is used to-day. There is altogether too much extravagance. For instance, a man told me he burned during some of the winter months 9,000 feet of gas a day. In 9,000 feet of natural gas we would have 9,000,000 units of heat. In a ton of coal there are 27,000,000 units of heat, so that this gentleman was con-suming theoretically one-third of a ton of coal a day. We say we don't burn co. well; but here is a man who, notwithstanding the fuel he consumed was in its most advantageous and convenient form, a gas, wasted more of it than it would have been possible had that same number of heat units been converted into coal. He could not have burned nearly a third of a ton of coal in a day in the number of fire-places he had. Yet in a gas, a form of fuel which should enable a man to be most economical, he wasted twice as much as he burned. This same waste is going on in manufacturing establishments where they are using two and a half units of heat of gas against what would require but one unit of heat of coal, while, in fact, with gas properly burned, they should be able to accomplish the same results with gas with just one-half of the units of heat now required when coal is used. As I said, the substitution of a manufactured gas for the

natural product can never come while these

"Artificial gas usually contains about one-third the number of units of heat found in natural gas. New companies undertaking to supply artificial gas at the same or less cost than the natural product will either have to furnish their customers with three times the amount of gas that they now use to enable them to get the same results, which would certainly be most unprofitable, or they must teach the people how to use gas properly, and this, at this time, seems impossible. Only the other day, in conversation with a wellknown manufacturer, I mentioned that the system of burning gas which he employe in his works was most extravagant and wasteful. I detailed to him some of the latest improvements which had come to my notice, when he turned around in his chair and remarked: "You don't seem to understand that we have our own well, What is the use to economize? If we don't get the gas, Mr. - will, mentioning the name of a gentleman who had wells close by him. Here was an instance of utter disregard for economy in the use of a good thing. It is so all over the country. Why, if all the gas burned and wasted in Pittsburg was to be made out of oil, the entire output of the country would not produce it. There will have to be some material changes in the methods of burning gas before manufactured fuel can take the place of natural gas and make a profit for the gas companies. Theoretically, gas making is about perfect in its process, 90 per cent, of the coal being saved; but the most troublesome and, as yet, unsolved problem, is how to handle it. If the supply required was always uniform there wo no trouble, but as the demand might fall from several million feet in the morning to several thousand in the afternoon, the gas maker who would supply the gen eral trade has a problem which is indeed difficult to solve."

QUAKER ANNIVERSARIES.

New Yorkers Set Right on a Matter of Local History.

Philadelphia Inquirer. Speaking of the Friends' meeting now in progress in New York, one of the metro-politan papers says that this meeting of the Friends marks the one hundredth anniversary of the society in New York and would have been celebrated as such were it not for the fact that next year the two-

hundredth anniversary of the Friends' So-ciety in America will probably be celebrated in Flushing. This statement is thoroughly in keeping with the reputation for historical accuracy that some of the New York papers have acquired. As long ago as 1671 William Ed-mundson, an English itinerant, held a Friends' meeting in the city of New York, being "moved of the Lord to get a meeting in that town, for there had not been one there before." From New York city Ed-mundson went to Long Island, where there "were many honest, tender Friends," The good Quaker itinerant held meetings on Long island before going to New England, where he engaged in debates with Roger Williams, both at Providence and Newport, On his return to Long island a few weeks later he found the Friends "much troubled in their meetings with several who were gone from the truth and become ranters." At this time George Fox was also doing missionary work on Long island, and Friends' meetings were held in all of the colonies from Salem to Charleston. Why next year should be the two-hundredth anniversary of the Friends' Society in America under such circumstances it is not easy to make out even if we leave out of the question William Penn's settle-

pers make anniversaries to suit themselves. The Popular Game.

Philadelphia Times. The whist congress is over and has adopted its rules, and of course there are

ment on the Delaware and the establish-

ment of a colonial government that has been considered noteworthy in Quaker an-

nals. The only possible explanation of the announcement is that the New York pa-